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Patent claims for USA:

1. A process for the preparation of chemical compounds of the formula (I)

$$R^1\text{-}SO_2\text{-}NH\text{-}CO\text{-}R^2 \qquad (I)$$

in which R^1 and R^2 are each an organic radical,
which comprises

a) reacting a resin-linker compound of the formula (II)

$$[\text{resin polymer}]\text{-}[\text{L-Nuc}]_n \qquad (II)$$

in which

[resin polymer]	is the radical of a resin which is connected via n binding sites with the n groups of the formula -L-Nuc as defined in formula (II),
L	is in each case an organic linker,
Nuc	is a nucleofugic group (leaving group) or a group to be activated under the reaction conditions to give a leaving group,
n	is the number of functional groups L-Nuc on the resin and is greater than or equal to 1,

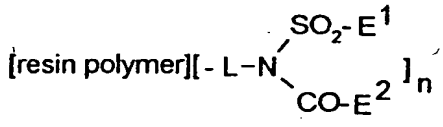
with an acylsulfonamide of the formula (III)

$$E^1\text{-}SO_2\text{-}NH\text{-}CO\text{-}E^2 \qquad (III)$$

in which E^1 and E^2 independently of one another in each case are an organic radical which is suitable for the preparation of the radicals R^1 and R^2 in compound (I),

in the presence of a condensing agent to give a resin-bound adduct of the

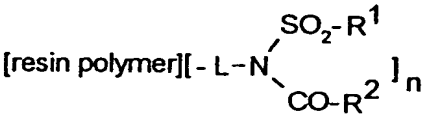
formula (IV)



(IV)

in which [resin polymer], L, n, E^1 and E^2 are as defined in formula (II) or formula (III),

b) derivatizing the adduct (IV) obtained in one or more further reaction steps on the organic radicals E^1 or E^2 and thus optionally reacting via resin-bound intermediates of the formula (IV'), which in contrast to formula (IV) contain the organic radicals $(E^1)'$ or $(E^2)'$ of the derivatives, to give the compound (IV")



(IV")

in which R^1 and R^2 are as defined in formula (I) and [resin polymer], L and n are as defined in formula (II) or formula (IV), and

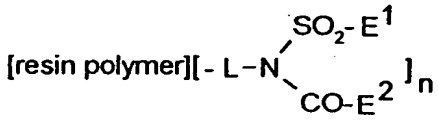
c) removing the compound of the formula (I) from the resin-linker adduct of the formula (IV").

2. The process as claimed in claim 1, wherein the linker is a linker from the group of linkers which can be employed for the binding of carboxylic acids in resin-bound synthesis.

3. The process as claimed in claim 1, wherein in formula (II) the linker L-Nuc is a group of the formula -CO-p-C_6H_4-S-CH_2CH_2-OH and the compound (II) is reacted with the acylsulfonamide as acidic component to give the resin-linker adduct of the formula (IV), ~~under the condensing conditions as~~ are analogously used for carboxylic acids according to the Mitsunobu reaction.

4. The process as claimed in claim 3, wherein the cleavage of the compound of the formula (I) from the compound of the formula (IV") is carried out with oxidation of the sulfur atom in the linker L to the sulfone and subsequent β-elimination.

5. A compound of the formula (IV)



(IV)

in which

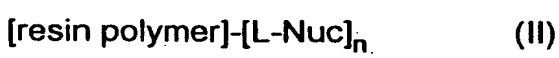
[resin polymer] is the radical of a resin which is connected to the groups of the formula E^1-SO_2-N-CO-E^2 via n binding sites and the linkers of the formula L,

L is in each case an organic linker,

n is the number of the groups bonded to the resin via the linker L,

E^1, E^2 independently of one another in each case are an organic radical.

6. A process for the preparation of a compound of the formula (IV) as defined in claim 5, which comprises reacting a resin-linker compound of the formula (II)

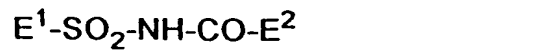


(II)

in which [resin polymer], L and n are as defined in formula (IV) and

Nuc is a nucleofugic group (leaving group) or group to be activated under the reaction conditions to give a leaving group,

with an acylsulfonamide of the formula (III)



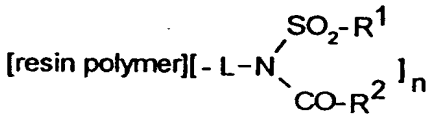
(III)

in which E^1 and E^2 are as defined in formula (IV),

in the presence of a condensing agent to give the resin-bound adduct of the formula (IV).

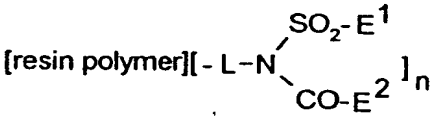
7. A process as claimed in claim 6, wherein the linker L-Nuc in formula (II) is a group of the formula -CO-p-C_6H_4-CH_2CH_2-OH and the compound (II) is reacted with the acylsulfonamide as acidic component to give the resin-linker adduct of the formula (IV) under the analogous conditions for a Mitsunobu reaction.

8. A process for the preparation of a compound of the formula (IV")



(IV")

in which [resin polymer], L, n, R^1, R^2 are as defined in formulae (I) and (II) in claim 1, which comprises derivatizing a compound of the formula (IV)



(IV)

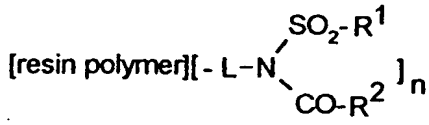
in which [resin polymer], L and n are as defined in formula (IV") and

E^1, E^2 independently of one another in each case are an organic radical suitable for the preparation of the radicals R^1 or R^2 in compound (IV"), in one or more further reaction steps on the organic radicals E^1 or E^2 and thus optionally reacting via resin-bonded intermediates of the formula (IV'), which in contrast to formula (IV) contain the organic radicals ($E^{1\prime}$) or ($E^{2\prime}$) of the derivatives, to give the compound (IV").

9. A process for the preparation of a compound of the formula (I),

$$R^1\text{-}SO_2\text{-}NH\text{-}CO\text{-}R^2 \qquad (I)$$

in which R^1 and R^2 in each case are an organic radical,
which comprises cleaving the compound of the formula (I) from the resin-linker adduct of the formula (IV")



(IV")

in which R^1 and R^2 are as defined in formula (I) and [resin polymer], L and n are as defined in formula (II) or formula (IV") as in claim 1.

10. The process as claimed in claim 9, wherein the linker L in formula (IV") is a group of the formula -CO-p-C_6H_4-S-CH_2CH_2-, the carbonyl group of the linker being bonded to the resin polymer, and the cleavage of the compound of the formula (I) from the compound of the formula (IV") taking place with oxidation of the sulfur atom in the linker L to the sulfone and subsequent β-elimination.

11. A compound of the formula (I)

$$R^1\text{-}SO_2\text{-}NH\text{-}CO\text{-}R^2 \qquad (I)$$

in which

R^1 is phenyl which is substituted in the meta or ortho position by a radical of the formula mono- or di[(C_1-C_4)alkyl]amino, (C_1-C_4)alkylcarbonylamino, (C_1-C_4)alkoxycarbonylamino, mono- or di[(C_1-C_4)alkyl]aminocarbonylamino, and

R^2 is (C_1-C_4)alkoxy or
phenyl which is unsubstituted or substituted by one or more radicals from the group consisting of halogen, nitro, cyano, (C_1-C_4)alkyl, (C_1-C_4)alkoxy and (C_1-C_4)alkylthio.